

REMARKS

Upon entry of the present amendment the Claims under consideration are Claims 1-14 and 39-46. Independent Claims 1, 2, 39, 41, and 43-46 are amended hereby to specify that the loops are made from fibers (and not from the web itself) and that the looped fibers exist in the claimed web according to the defined term “as formed z-direction fibers” per page 7, line 17 of the specification and further exist without pleats being formed in the web. The Detailed Action of 03 February 2004 will now be addressed, in so far as it is understood, with reference to any headings and paragraph numbers contained therein.

Specification

Per paragraph 18 of the Detailed Action the specification is objected to as “failing to provide proper antecedent basis for the claimed subject matter.” It is unclear to Applicants what is meant by the statement of the Detailed Action: “the drawings are not in the specification.” It is further unclear how the schematic representation of looped fibers of Fig. 2 are inaccurate, or how proper antecedent basis is lacking when the Detailed Action cites the photomicrographs of Figs. 4 and 5 as representing the claimed embodiments of the present invention. Clarification is respectfully requested from the Office in a subsequent non-final action.

Claim Rejections 35 USC § 102

Per page 2, paragraph 21 of the Detailed Action, Claims 1 and 39-40 stand as anticipated by Holtman, US Patent 4,578,070 (hereinafter “Holtman”).

Applicants have herewith amended each of independent Claims 1, 2, 39, 41, and 43-46 to specify a material comprising substantially continuous as formed z-direction fibers with a z-direction orientation. Thus, in order to meet the claims of the present invention, a nonwoven material must meet these (underlined) terms as defined in the specification at page 7 of the present application by the language:

"As used herein, the term "z-direction" refers to fibers disposed outside of the plane of orientation of a web. ... The term "as formed z-direction fibers" as used herein refers to fibers that become oriented in the z-direction during forming of the nonwoven web as distinguished from fibers having a z-direction component resulting from post-forming processing of the nonwoven web, such as in the case of mechanically crimped or creped nonwoven webs."

Applicants have herewith amended each of Independent Claims 1, 2, 39, 41, and 43-46 to specify that the loops are formed of and from the fibers and not from the finished web itself. This is unlike Holtman, wherein any "loops" are formed from the web and not from individual fibers.

Applicants have further amended each of Independent Claims 1, 2, 39, 41, and 43-46 to again specify that the present invention derives its loops without pleating of a finished web. Support is found in the specification at page 4, line 6, to wit:

"In contradistinction to the known art, the present invention does not first form a web of material and pleat it."

Thus, no person having ordinary skill in the art would mistake the meaning, scope or intent of the present claims to include the known art which forces the entire web into the Z-direction by pleating of the web without changing the orientation of individual fibers to the web itself.

Applicants further respectfully submit that physical differences between a web of the presently claimed invention and that of a pleated web according to Holtman would be readily evident to a person having ordinary skill in the art.

Holtman teaches a pleating of a web, preferably of carded staple fibers (see col. 5, line 23). The present invention on the other hand, teaches and claims loops formed of substantially continuous fibers extending in the Z-direction of the web. Thus, the present invention and Holtman are operating at two entirely different levels of construction, with Holtman operating at the level of an already formed web and the present invention operating at the level of

fibers. Holtman does not disclose the closed looped fibers of the present claims nor the open spaces formed thereby, or their corresponding channels, which are a consequence of the closed looped fiber arrangement of the present invention. The pleating of the web of Holtman only changes the orientation of the overall web, and not the orientation or geometry of the fibers within the web, as is taught and claimed by the present invention, nor is Holtman's pleating taught as producing any of the claimed loop geometries or wave bonding specifically set forth in the claims dependent from Claims 1 and 39. Thus, it appears that the teachings of Holtman do not disclose, and would not lead a person having ordinary skill in the art to practice, the present invention as a whole.

To reinforce these distinctions over the prior art, Applicants have particularly added limitations which explicitly exclude the pleating or folding of fully formed webs to achieve any structure which might superficially resemble the present invention.

The Detailed Action states at page 3 that the corrugations of Holtman are identical to the claimed loops of fibers recited in the present invention. However, it has been shown above that the corrugations or pleats of Holtman are not identical to the loops of fibers of the present claims. Thus, when Holtman and the presently claimed invention are each considered as a whole, it is clear that the presently amended claims further define over the cited art. It is therefore respectfully requested that the present rejections be withdrawn.

Claim Rejections 35 USC § 103

Per page 4, paragraph 22 of the Detailed Action, Claims 2-14 and 41-46 stand rejected as obvious over Holtman in view of EP 137 644 (hereinafter "EP '644"). Applicants respectfully reiterate their above arguments concerning the lack of teaching of Holtman with respect to the present claims.

It is the contention of the Detailed Action at page 5, that EP '644 describes the claimed channels not taught by Holtman, as seen in EP '644 Figures 10 and 12. Applicants respectfully disagree with the statement at page 5, last paragraph, of the Detailed Action that the open spaces between (sic) the webs (sic) of EP '644 are elliptical. In so far as the Detailed Action is understood, Applicants believe that all pleatings and spaces therebetween shown by EP '644 are sinusoidal and therefore cannot be described as elliptical. More importantly, EP '644 merely teaches variants of the pleated web of Holtman. Applicants therefore incorporate all discussion above with respect to how the present claims define over Holtman or other pleated web structures of the known art. EP '644, like Holtman, does not teach loops formed of substantially continuous fibers as claimed in the present invention. Therefore it is respectfully requested that the present rejections also be withdrawn.

Conclusion

The amendments and additions to the present Claims now make clear that the loops created by the present invention are substantially continuous fibers folded to provide closed loops creating open areas within the closed loops and/or within the web. This is in opposition to the known art of pleating webs as illustrated by Holtman or EP '644 which do not singly or in combination teach closed fiber loops creating open spaces within the loops nor the aggregation of loops to form channels within the web. It has further been made clear that the present claims do not encompass the known art of pleated webs.

It is believed that each of the Claims has now been placed in condition for allowance. A notice to that effect is earnestly solicited.

Request For Telephonic Interview

Clearly, there are differences between the present invention and the cited reference(s) involving patentable subject matter. These differences are believed by the Applicants

to be properly defined in the present Claims. Applicants have been informed that the Examiner who authored the Detailed Action has retired. The present Examiner is requested to call Applicants' attorney (per the provisions of M.P.E.P. § 713) to discuss any further problems or suggest solutions in defining the present invention in order to expedite the case towards allowance before issuing any final Office Action.

Favorable consideration is requested.

Respectfully submitted,



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